

10-1-2018

Why Do Wages Differ across Businesses within the Same Labor Market?

Eliza C. Forsythe
University of Illinois, Urbana Champaign

Follow this and additional works at: https://research.upjohn.org/empl_research

Citation

Forsythe, Eliza C. 2018. "Why Do Wages Differ across Businesses within the Same Labor Market?" *Employment Research* 25(4): 4-6. [https://doi.org/10.17848/1075-8445.25\(4\)-2](https://doi.org/10.17848/1075-8445.25(4)-2)

This title is brought to you by the Upjohn Institute. For more information, please contact repository@upjohn.org.

Evidence-Based Reform of the Unemployment Insurance System

unemployed workers. Job search assistance and other reemployment services programs have been shown to be highly cost-effective in promoting return to work and in shortening durations of UI benefit receipt.

- The UI and ES programs need sufficient funding to provide displaced workers with intensive, in-person job search assistance.
- Funding of reemployment services—under both the Wagner-Peyser Act and the Workforce Innovation and Opportunity Act—should be increased, with Wagner-Peyser Act funding restored to its 1984 level in real terms.
- Other reemployment and unemployment prevention services can speed the return to work of UI recipients by expanding the use of short-time compensation and self-employment assistance programs, and by enacting a program of targeted reemployment bonuses.

CONCLUSION

Public policy regarding the UI program has been neglected for many decades. Much of the program is broken and requires major reform now. Both states and the federal government should adopt policies and enact legislation that can restore the program, consistent with its original intent. Otherwise, the system will be inadequate in the future, particularly when it is needed during the next recession. The changing nature of the workforce requires that the UI system provide adequate benefits to every worker while remaining financially solvent to ensure a competitive economy and a well-functioning workforce.

Stephen A. Wandner is a Research Fellow at the W.E. Upjohn Institute for Employment Research, a Non-Resident Fellow at the Urban Institute, and a Senior Fellow at the National Academy of Social Insurance.

Why Do Wages Differ across Businesses within the Same Labor Market?

Eliza C. Forsythe

The idea that wages can differ across businesses in the same market seems contrary to basic economic theory. Yet, we find that wages do differ across establishments. Looking at the service sector—which has grown steadily for decades in numbers and as a share of total U.S. employment but pays less than most other major sectors—I find great variation in wages paid to workers at the lowest end of the pay scale. More specifically, the bottom 10 percent of establishments pay wages below \$8.07 per hour to employees in their lowest decile of wages, while the top 10 percent of establishments pay wages above \$21.14 to employees in their lowest decile. I also find that establishments that pay low wages to those workers in the lowest decile of the wage distribution within an establishment also pay low wages throughout the pay scale.

The heterogeneity of wages across establishments is important not only to explain why wages differ in single labor markets but also to help understand the implications of various public policies such as minimum wage legislation. For example, minimum wage legislation that requires wages to be above \$10 an hour will have no

effect on establishments that pay their lowest paid workers \$21 an hour, while it could have significant effects on establishments that pay their lowest paid workers only \$8 an hour. I find that even in the service sector, in which a substantial fraction of employees is paid close to statutory minimum wage, there is substantial variation in wages across establishments in which some are not impinged by such a wage floor.

Previous research on wage heterogeneity between firms has found that wages vary by firm size, with larger firms paying more than smaller firms, even within the same industry. Several studies have also found that establishments within the same industry adopt different management and production technologies, which can lead to differences in productivity with the understanding that more productive firms can pay higher wages. I contribute to this literature by examining the wage and occupational structure for service sector establishments in the United States in 2016.

Methodology

This article describes results from my recent study and working paper, “The Occupational Structures of

ARTICLE HIGHLIGHTS

- *Establishments within narrowly defined industries and within the same local labor market pay different wages.*
- *These establishments differ significantly in their occupational structure, which indicates that apparently similar establishments can differ substantially by production process yet still compete in the same market.*
- *The variation in wages and occupational structures suggests that public policies such as minimum wage may affect workers differently, even within the same industry and labor market.*

Low- and High-Wage Service Sector Establishments,” which uses a new methodology to measure and explain differences across establishments in wages and productivity (see https://research.upjohn.org/up_working_papers/292). I measure differences in earnings and productivity by examining differences in occupational and management structure using the Occupational Employment Statistics (OES) Survey. While aggregate OES data are publicly available, the working paper uses restricted-access establishment-level microdata, which provide the wage and occupational distribution for each establishment.

For the purposes of this analysis, I define a low-wage establishment as one that pays its 10th percentile workers less than the median of wages at the 10th percentile of all establishments in that local labor market. The OES includes as compensation regular wages, bonuses, and tips but not does not include overtime and does not distinguish between full-time and part-time employment. I concentrate on establishments in the service sector and use six-digit NAICS codes for the industry classification and 712 commuting zones for local labor markets. I also restrict my sample to commuting zones with at least 10 establishments—this reduces the final sample size to 49,578 establishments, which is roughly a quarter of the number of establishments available in the OES for the second quarter of 2016. More detailed descriptions of the data and methodology can be found in my working paper.

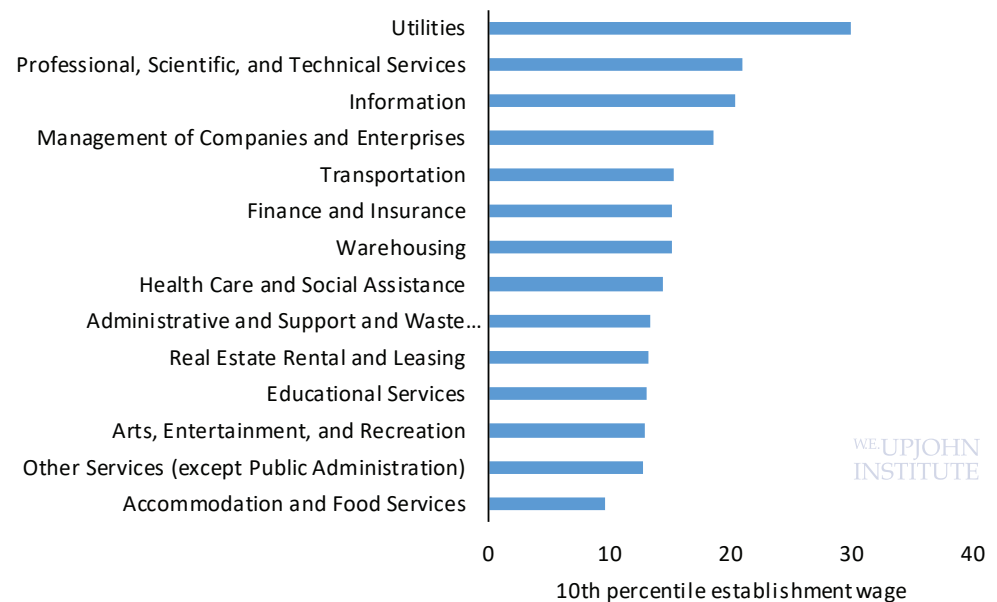
Variation in wages

Figure 1 shows variation in wages paid to employees at the 10th percentile of establishments’ wage distributions across two-digit industries. Here we see that Utilities have the highest 10th percentile wages, on average over \$30 per hour, while Accommodation and Food Services have 10th percentile wages of under \$10 per hour.

Figure 2 takes the analysis one step further by showing that wages differ along the wage distribution between low-wage and high-wage establishments operating in the same commuting zone and detailed industry.

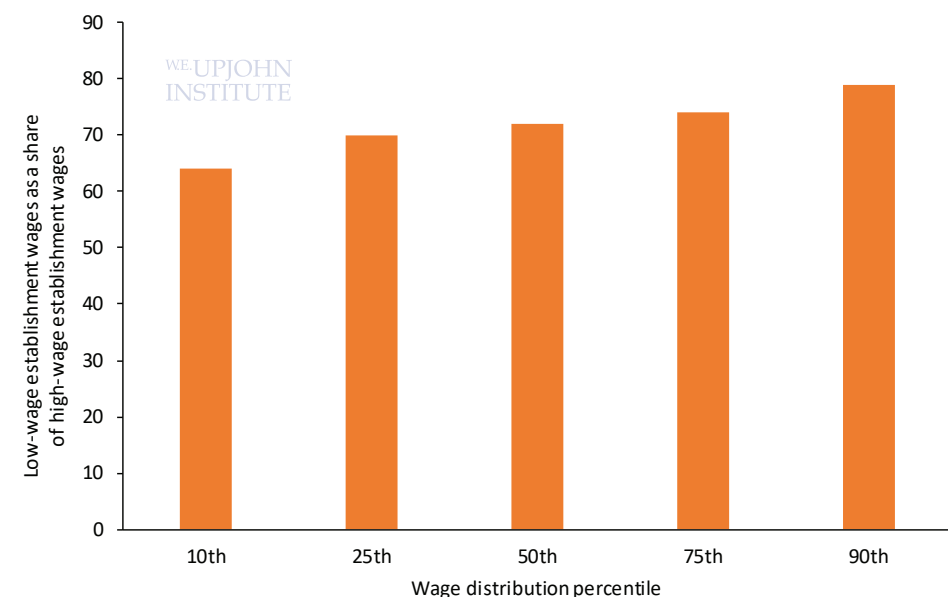
To show the difference, I plot wages of low-wage establishments at each major percentile along the wage distribution as a share of wages of the high-wage establishment.

Figure 1 Variation in Wages Paid to Workers at the Lower End of the Pay Scale across Selected Industries



SOURCE: Author's calculations

Figure 2 Gap in Wages Paid by Low-Wage and High-Wage Establishments along the Wage Distribution



SOURCE: Author's calculations

Why Do Wages Differ across Businesses within the Same Labor Market?

The difference in wages between low- and high-wage establishments narrows for higher-paid workers. For example, while low-wage workers at low-wage establishments receive 64 percent of wages paid to low-wage workers of high-wage establishments, high-paid workers (at the 90th percentile) at low-wage establishments receive 79 percent of what is paid to high-wage workers at high-wage establishments. Thus, while low-wage establishments pay lower-wages throughout the pay scale, the differences are more extreme for the lowest paid workers.

Another way to analyze the wage distribution is to examine wage inequality within establishments. In the working paper, I show that the individuals in the 90th percentile of wages in low-wage establishments earn 1.5 times as much as individuals earning 10th percentile wages, while in high-wage establishments, this ratio is only 1.35. This measure indicates that low-wage establishments have a more unequal wage pay scale than high-wage establishments.

Variation in occupational structure

After exploring several reasons for wage differences across low- and high-wage establishments, I focus on differences in production processes across establishments. To represent the production function of establishments, I examine differences in occupational and management structures. Since occupations describe the tasks that workers perform on the job, if two establishments in the same industry employ a different mix of occupations it suggests that there are substantive differences in how the two establishments produce the same product. Further, I can directly measure how many individuals work in technology-associated occupations, which provides an indication of how much technology is used in the establishment.

I find significant variation in the share of occupations across low- and high-wage establishments within the same narrow industry and labor market. Figure 3 displays the share of total establishment employment for

employees in five key occupations. I find that high-wage establishments employ larger shares of employees in professional occupations (as defined by OES) and tech occupations while employing smaller shares of service, clerical, and production workers. Since professional and tech occupations rely on employees using cognitive skills, these results offer suggestive evidence that high-wage establishments may substitute brains for brawn, which in turn may indicate that these establishments are more productive overall.

Conclusion

In this article, I document that establishments within narrowly defined industries and within the same local labor market pay different wages. These wages differ not only for workers at the lowest decile of an establishment's wage distribution but also for workers all along the distribution. This contrasts with simple economic theory, which suggests that similar workers in the same market should be paid the same wage. I show that these establishments differ significantly in their occupational structure, which indicates that apparently similar establishments can differ substantially by production process yet still compete in the same market. The variation in wages and occupational structures suggests that public policies such as minimum wage may affect workers differently, even within the same industry and labor market.

Figure 3 Differences in Share of Employment for Selected Occupations between Low-Wage and High-Wage Establishments



SOURCE: Author's calculations.

This research was conducted with restricted access to the Bureau of Labor Statistics (BLS) data. The views expressed here do not necessarily reflect the views of the BLS or the U.S. government.

Eliza C. Forsythe is an assistant professor in the School of Labor and Employment Relations and the Department of Economics at the University of Illinois, Urbana Champaign.